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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,124	11/18/2005	Tony Amato	745691-39	2453

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EXAMINER	
GORDON, BRYAN P	

ART UNIT	PAPER NUMBER
2834	

MAIL DATE	DELIVERY MODE
04/29/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/534,124	AMATO ET AL.	
	Examiner	Art Unit	
	BRYAN P. GORDON	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kreuter (US PN 4,013,552) and in view of Ehlert (US PN 5,110,403).

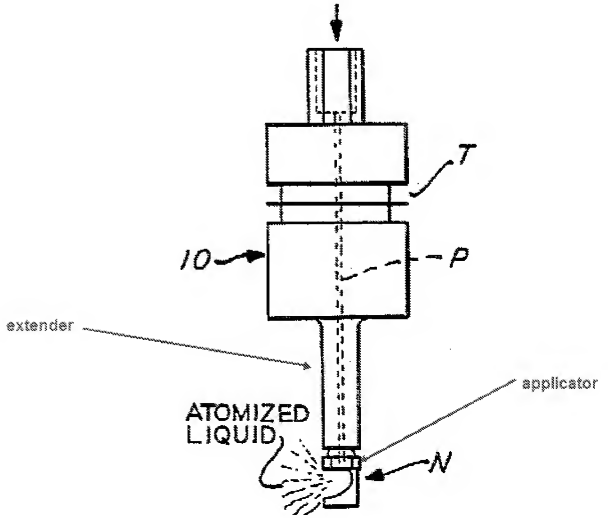

Figure A

6. Considering claim 1, Kreuter (Figure A) teaches a sewage slurry ultrasonic apparatus for applying ultrasonic energy to sewage slurry, the apparatus comprising: an applicator having an outwardly facing surface and an extender which extends from the outwardly facing surface.

However, Kreuter does not teach at least one booster.

In the same field of endeavor, Ehlert (Figure 6) teaches at least one booster (601). It would be obvious to have a booster combined with Kreuter's device since it is well known in the art that horns consist of a booster to amplify the ultrasonic energy. Therefore, the device consisting of an applicator, extender and booster would be integrally formed.

7. Considering claim 2, Ehlert (Figure 2) teaches wherein the applicator has a central aperture defined by an inwardly facing surface (203).

8. Considering claim 3, Ehlert teaches wherein the inwardly facing surface oscillates when ultrasonic energy is applied to the apparatus. It would be obvious to one of ordinary skill in the art that Ehlert's device vibrates when power is supplied.

9. Considering claim 4, the method of forming the integral applicator, extender and booster are not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

10. Considering claim 5, Kreuter discloses the claimed invention except for the integral applicator, extender and booster are formed form metal. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the integral applicator, extender and booster are formed form metal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

11. Considering claim 6, Kreuter discloses the claimed invention except for wherein the metal is an alloy. It would have been obvious to one having ordinary skill in the art

at the time the invention was made to have the metal as an alloy, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

12. Considering claim 7, Kreuter discloses the claimed invention except for wherein the alloy is a titanium-containing alloy. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have an alloy is a titanium-containing alloy, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

13. Considering claim 8, Kreuter discloses the claimed invention except for wherein the alloy is a titanium aluminum-containing alloy. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have an alloy is a titanium aluminum-containing alloy, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice.

14. Considering claim 9, Kreuter discloses the claimed invention expect for the titanium, aluminum and vanadium in a molar ratio of 6:4:1. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a molar ration of 6:4:1, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

Response to Arguments

15. Applicant's arguments filed 13 February 2009 have been fully considered but they are not persuasive. Regarding Kreuter and Ehlert failing to teach wherein an applicator, extender and booster are integrally formed the combination above discloses the claimed invention except for the parts being formed integrally. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form them integrally, since it has been held that forming in one piece an article which has formerly been formed two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works,* 150 U.S. 164 (1893).

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

17. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRYAN P. GORDON whose telephone number is

(571)272-5394. The examiner can normally be reached on Monday-Thursday 8:00-5:30, Friday 7:30-4:00.

19. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quyen Leung can be reached on 571-272-8188. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Quyen Leung/
Supervisory Patent Examiner, Art Unit 2834

/Bryan P Gordon/
Examiner, Art Unit 2834